## REMARKS

Claims 1-27 and 28 are pending in this application. Claims 1-27 are rejected. Claim 15 is objected to for an informality. Claim 19 is objected to as being dependent upon a rejected base claim. Claim 27 has been canceled without prejudice, waiver, or disclaimer. Claim 28 has been newly added. No new matter has been added. It is respectfully submitted that the pending claims define allowable subject matter.

Claim 5 has been objected to for informalities. Applicant has amended claim 5 to replace "least" with "at least" as required by the Office Action. Accordingly, Applicant submits that the objection has been overcome and should be withdrawn.

Claims 23 and 25 have been rejected under 35 U.S.C. § 102(e) as being anticipated by O'Neill (U.S. Patent Application Publication 2004/0176027). Applicant respectfully traverses this rejection.

O'Neill describes a repeater system for use in communications, and in particular cellular system communications (abstract). In particular, a repeater system 20 is located in a high-rise building 22, in the interior of an external room 24 in the building, preferably near a window 26. A mobile or cellular telephone system 30 exists in the surrounding area of the building 22. Located within or nearby the room 24 in the building 22 may be one or more subscriber units 32 (e.g., cellular or other wireless telephones). More particularly, the mobile telephone system 30 includes a plurality of base stations 34 located in the vicinity of the building 22. Each of these base stations 34 may operate at different transmit and receive frequencies than adjacent base stations 34 for TDMA and GSM technology systems, while they may operate at the same transmit and receive frequencies as adjacent base stations for CDMA technology systems. Each base station 34 has an antenna system 36 associated therewith (paragraphs 0045 and 0046).

There may be several subscribers carrying subscriber units 32 in the room 24 having a window 26. Additionally, there are many competing downlink signals 40 that can potentially be received by the subscriber units 32 in the absence of the repeater system 20. The repeater system 20 receives selected ones of these downlink signals 40 via an antenna 200, amplifies the signals 40, and transmits an amplified downlink signal 42 from an antenna 400. Due to the relatively

greater signal strength of the amplified downlink signal 42 in the vicinity of the repeater system 20, each of the subscriber units 32 use that signal 42 rather than the competing downlink signals 40. The subscriber units 32 send uplink signals 44 directly back to the base station in conventional fashion. There is no need for a repeater system for the uplink direction, although one can be employed if desired (paragraph 0047).

Claim 23, as amended, recites an apparatus comprising a communication module mountable to the side of a building and the communication module is configured to "transmit the radio signal substantially parallel to an outside surface of the building" and "transmit the radio signal into the building." O'Neill fails to describe or suggest such an apparatus.

O'Neill describes a system wherein a plurality of downlink signals are received from the plurality of base stations through a window of a building at an antenna of the repeater system. The downlink signals are then amplified for transmission to subscriber units. The subscriber units also may transmit directly back to the base stations or optionally through the repeater system. The downlink signals are received in different directions and at different angles. However, in contrast to the apparatus recited in claim 23, the system of O'Neill does not describe or suggest transmitting radio signals substantially parallel to an outside surface of the building. The system of O'Neill is configured to communicate between subscriber units in a building and a plurality of base stations. There is no description or suggestion of communicating information parallel to an outside surface of the building, for example, to communicate between subscriber units on different floors of a building. The system of O'Neill uses the base stations to communicate between subscribers. Accordingly, Applicant submits that O'Neill does not describe or suggest an apparatus as recited in independent claim 23.

Claim 25, as amended, recites a method comprising "receiving a radio signal at a communication module, wherein the communication module is mounted to the side of a building, wherein the radio signal originated from an elevation different than the communication module and the signal includes an indication of the elevation from which the signal was transmitted." O'Neill fails to describe or suggest such a method.

O'Neill describes a system wherein voice data is amplified to overcome co-channel interference over a small area (e.g., in a room of a building). However, there is no description or suggestion in O'Neill of providing an indication in the signal of the elevation from which the

signal was transmitted. O'Neill is not concerned with where the signal originated, only how to amplify signal. Accordingly, Applicant submits that O'Neill does not describe or suggest a method as recited in independent claim 25.

Newly added claim 28 depend from independent claim 25, which is submitted to be in condition for allowance. When the recitations of claim 28 are considered in combination with the recitations of claim 25, Applicant submits that dependent claim 28 is likewise patentable over the prior art for at least the same reasons set forth above and based on the dependency of claim 28 from independent claim 25.

Thus, for at least the reasons set forth above, Applicant respectfully requests that the 35 U.S.C. § 102(e) rejection of claims 23 and 25 be withdrawn.

Claims 1, 2, 5, 7, 15-18 and 20-22 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yonezawa et al. (U.S. Patent Application Publication 2003/0211827) in view of Yarkosky (U.S. Patent 6,895,218). Applicant respectfully traverses this rejection.

Yonezawa et al. describes a repeater for radio communication that eliminates a blind zone in a closed space (abstract). The repeater 200 includes a base station-directed antenna 21, a base station-directed unit 33, a mobile station-directed unit 34, and a mobile station-directed antenna 28. In operation, the down-link signal from the base station is received by the base station-directed antenna 21 and amplified by a down-link receiving amplifier 22. Next, the amplified received signal is frequency or media-converted by a down-link signal converter 23 and the converted signal is transmitted from a base station-directed repeater 24 to the mobile station-directed unit 34. In the mobile station-directed repeater 34, the signal transmitted from the base station-directed unit 33 is received by a mobile station-directed repeater 25, and the received signal is regenerated by a down-link signal regenerator 26. The regenerated signal is amplified by a down-link transmitting amplifier 27 and transmitted over a radio transmission medium EM from the mobile station-directed antenna 28 (paragraphs 0031 and 0033).

An up-link signal for transmission from a mobile to a base station also may be received by the mobile station-directed antenna 28 and amplified by an up-link receiving amplifier 29. Next, the amplified signal is frequency or media-converted by an up-link signal regenerator 30, and the converted signal is transmitted over the radio transmission medium EM from the mobile

station-directed repeater to the base station-directed unit 33. In the base station-directed unit 33, the signal transmitted over the radio transmission medium EM from the mobile station-directed unit 34 is received by a base station-directed repeater 24 and then regenerated by an up-link signal regenerator 31 to a signal of the system used. The regenerated signal is amplified by an up-link transmitting amplifier 32 and radiated from the base station-directed antenna 21 (paragraph 0034).

The repeater may be used in connection with a radio media. In this configuration, a base station-directed unit 1, which corresponds to the base station-directed unit 33, is placed in a room 52 communicable with the base station, and a mobile station-directed unit 51, which corresponds to the mobile station-directed unit 34, is placed in a room 54 in a blind zone. The base station-directed unit 51 and the mobile station-directed unit 53 are linked via the radio transmission medium EM over which a frequency-converted radio repeating signal (an electromagnetic wave signal) 55 is transmitted. Because the radio repeating signal 55 is capable of passing through walls, floors and so forth, a plurality of rooms or floors can be provided as a service area, for instance, by using one base station-directed unit and a plurality of mobile station-directed units (paragraph 0035).

In an infrared-ray communication or optical wireless media application, for example, in an underground shopping center, a base station-directed antenna 61 is placed on the ground, and a base station-directed unit 62 placed at one end of the ceiling of the underground shopping center and a mobile station-directed unit 63 provided at the center of the ceiling of the underground shopping center. The base station-directed unit 62 and mobile station-directed unit 63 are interlinked via the radio transmission medium EM over which an infrared-ray or repeated light wave (an electromagnetic wave signal) 64 is transmitted allowing communications in a service area 65 extended by the repeater. With the base station-directed unit 62 and the mobile station-directed unit 63 placed at a high position such as on the ceiling of the underground shopping center, humans and articles do not intercept the repeated signal (paragraph 0036).

Yarkosky describes a method for in-building distribution using wireless access technology (abstract). In particular, a propagation relay includes a first antenna 50 used to receive downlink signals from a base station. The antenna may also receive various other signals in addition to the downlink signals. After receiving a downlink signal, the signal is transmitted

along a connection 52 to a receiver 54. The receiver 54 extrapolates the downlink signal, according to the known downlink frequencies, from the other various signals received by the antenna. The receiver 54 then sends the downlink signal across connection 56 to a frequency converter 58. The frequency converter 58 converts the downlink signal from the downlink frequency to an intermediate downlink frequency. The resulting intermediate downlink signal is then sent from the frequency converter 58 along connection 60 to a transmitter 62. The transmitter 62 then sends the intermediate downlink signal to a second antenna 66 via a connection 64 for transmission to mobile stations (column 4, line 16-34).

A mobile station interface port 12 is located inside an enclosure and contains an antenna, a receiver and transmitter, a power source and additional control circuitry for performing the frequency conversions. Once the mobile station interface port 12 receives the intermediate downlink signal 10, the mobile station interface port 12 converts the intermediate downlink signal 10 back to the original downlink signal 14 and transmits the signal to the mobile stations 16. The original downlink signal 14 is transmitted at the same frequency as the downlink signal 6 (column 4, lines 44-58).

Claim 1, as amended, recites a communication system comprising "a first communication module adapted to: receive a first type of communication signal, convert the first type of communication signal to a second type of communication signal and transmit the second type of communication signal to a second communication module if the received signal is a priority signal." The combination of Yonezawa et al. and Yarkosky fails to describe or suggest such a communication system.

Yonezawa et al. describes a system to improve blind zone communications using a plurality of directed antennas communicating using a radio transmission medium (e.g., EM transmission). Yarkosky describes a propagation relay that uses an intermediate frequency to facilitate communication of wireless data within an enclosure. Neither reference describes or suggests performing the repeating or converting based on the type of signal. Both systems are concerned with reducing the cost of the systems and not distinguishing between different types of signals. There is simply no description or suggestion of performing signal conversion and transmission only if the received signal is a priority signal as recited in amended claim 1.

Accordingly, Applicant submits that the combination of Yonezawa et al. and Yarkosky does not describe or suggest a communication system as recited in independent claim 1.

Claims 2, 5, 7, 15-18 and 20-22 depend from independent claim 1. When the recitations of claims 2, 5, 7, 15-18 and 20-22 are considered in combination with the recitations of claim 1, Applicant submits that dependent claims 2, 5, 7, 15-18 and 20-22 are likewise patentable over the combination of Yonezawa et al. and Yarkosky for at least the same reasons set forth above.

Claims 3 and 12 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yonezawa et al. (U.S. Patent Application Publication 2003/0211827) in view of Yarkosky (U.S. Patent 6,895,218) and further in view of Iwata et al. (U.S. Patent Application Publication 2004/0137842 A1). Applicant respectfully traverses this rejection.

Yonezawa et al. and Yarkosky are described and discussed in more detail above. Even from a cursory reading of the Iwata et al. reference, this reference fails to make up for the deficiencies of the Yonezawa et al. and Yarkosky references. Further, claims 3 and 12 depend from independent claim 1. Thus, when the recitations of claims 3 and 12 are considered in combination with the recitations of claim 1, Applicant submits that dependent claims 3 and 12 are likewise patentable over the combination of Yonezawa et al. and Yarkosky and further in view of Iwata et al. for at least the same reasons set forth above.

Claim 4 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yonezawa et al. (U.S. Patent Application Publication 2003/0211827) in view of Yarkosky (U.S. Patent 6,895,218) and further in view of Menard (U.S. Patent Application Publication 2004/0203563). Applicant respectfully traverses this rejection.

Yonezawa et al. and Yarkosky are described and discussed in more detail above. Even from a cursory reading of the Menard reference, this reference fails to make up for the deficiencies of the Yonezawa et al. and Yarkosky references. Further, claim 4 depends from independent claim 1. Thus, when the recitations of claim 4 are considered in combination with the recitations of claim 1, Applicant submits that dependent claim 4 is likewise patentable over the combination of Yonezawa et al. and Yarkosky and further in view of Menard for at least the